

REMARKS

Claims 1-15, 17, 18, and 20 are pending, of which claims 17, 18, and 20 are withdrawn. The applicants amend claims 1-15, 17, and 18. Claims 1-15 are presented for examination in view of the amendments and the following remarks.

Claims 1, 3-7, 11-13, and 15 were rejected under 35 U.S.C. 102(b) as being anticipated by GB 2297137 ("Jarvenkyla '137") or GB 2297138 ("Jarvenkyla '138"). Claims 2 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jarvenkyla '137 and Jarvenkyla '138. Claims 8-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jarvenkyla '137 and Jarvenkyla '138 in view of U.S. Pat. No. 4,606,953 ("Suzuki").

Claim 1, as amended, specifies "a strength of an adhesive bond between the first outer protective layer and the second inner bonding layer of the skin layer is at least two times a strength of an adhesive bond between the bonding layer and the inner core."¹

The office action acknowledges that the Jarvenkyla references (Jarvenkyla '137 and Jarvenkyla '138) do not describe the specific amount of adhesion claimed.² The office action asserts that

such are considered to be merely choices of mechanical expedients where one skilled in the art would only require routine experimentation to arrive at optimum values. It would have been obvious to modify the inner bonding layer of Jarvenkyla (GB 137 and GB 138) to be formed of any thickness and amount of bonding strength as such are merely choices of mechanical expedients where one skilled in the art would only require routine experimentation to arrive at optimum values to improve the adhesion and holding of the bonding layer to prevent failure of such.³

However, while the discovery of an optimum value of a variable in a known process is normally obvious, this is not the case where the parameter optimized was not recognized in the prior art as one that would affect the results.⁴ It has not been shown that a person of ordinary skill in the art would recognize the importance of the relative differences between the adhesive strengths. In particular, the cited references art does not disclose the relationship between the adhesion of the

¹ This feature is supported, for example, on page 6 of the specification as filed.

² Office action dated April 2, 2009, page 3.

³ Office action dated April 2, 2009, page 3.

⁴ Ex parte Whalen (Bd. Pat. App. & Int., July 23, 2008).

adhesive layer to the outer protective layer relative to the adhesion of the adhesive layer to the inner core as impacting the suitability of the pipe for its intended purpose.

The applicants note that the various parameters for each of the claimed features such as the adhesion between the first outer protective layer and the second inner bonding layer or between the bonding layer and the inner core can vary over substantial ranges. Similarly, the inner and outer layers of the pipe and the adhesive could be made from a variety of materials. Thus, it is difficult to see how the skilled person could reasonably optimize all of these different parameters simultaneously since certain of these features will be interrelated. Thus, it may be possible to optimize a particular value or feature independently of all of the others but it will not be possible for the skilled person to optimize a number of different features relative to each other.

While a person of ordinary skill in the art may optimize the individual values for the particular layers, the skilled person would not recognize the importance of the relative differences between the adhesive strengths. The optimization of particular values may occur but it is not correct to assume that it is possible to optimize every particular feature relative to each other feature. Optimization focusing on the feature claimed by the applicants can only be obtained by impermissible hindsight.⁵ Moreover, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."⁶ The necessary rational underpinning is lacking here.

In this particular case, the relative values of the adhesion of the adhesive layer to the outer protective layer relative to the adhesion of the adhesive layer to the inner core is more important than the absolute values. The relative values, and the fact that the adhesion between the first outer protective layer and the second inner bonding layer is at least twice the strength of the adhesive bond between the bonding layer and the inner core allows the protective layer to be easily and effectively removed without damaging the underlying layer. At the same time, the

⁵ KSR International Co. v. Teleflex Inc. et al., 127 S.Ct. at 1742.

⁶ KSR International Co. v. Teleflex Inc. et al., 127 S.Ct. 1727, 1741.

relative values of adhesion allow the outer layer to remain intact during laying of the pipe in the field. The effect of this feature cannot be overestimated.

Suzuki has not been shown to remedy the deficiencies of Jarvenkyla '137 and Jarvenkyla '138. Consequently, claim 1 and the associated dependent claims are neither anticipated nor made obvious by the cited references.

The remaining claims are dependent on claim 1 and are allowable for at least the same reasons.


Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

No fees are believed to be due. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 09294-0021US1.

Respectfully submitted,

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Sean M. Dean
Reg. No. 46,656

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (877) 769-7945